7. From the inside looking out: travelling the world from the parlour. By Naomi Daw

In 1858, the Photographic Society of London and the Societé Francaise de Photographie held the first exhibition of photographic works at the South Kensington Museum in London. The South Kensington Museum (now the Victoria and Albert Museum) had been established in 1852 following the Great Exhibition of 1851. The Photographic Society of London had been holding annual photography exhibitions as early as 1854, but the decision to move the exhibition from private spheres to a public museum reflected the increasing prominence and popularity of the photographic medium. At the 1858 exhibition, one thousand and nine photographs were on display, including two hundred and fifty works imported from the Societé Francaise de Photographie in Paris. The range of subject matter on display at the exhibition was extensive, encompassing portraiture, landscape, architectural views, and reproductions of works of art. The exhibition was ambitious because of the range of subject matter on display and the rapidly increasing popularity of photography in the period. Photography's role as a new form of visual representation after the separate announcements of its invention in 1839 by Louis Daguerre (1787-1851) and William Henry Fox Talbot (1800-1877), added an extra layer of innovation to the 1858 exhibition at the South Kensington Museum. As Anne Maxwell (2000, p.9) notes, photographers were employed by exhibition managers to document exhibits, transforming the 'fleeting spectacles' into 'permanent, portable objects that could function as memorabilia and collectors' items'. The 1858 exhibition of photography at the South Kensington Museum is no exception to this process; indeed, the Victoria and Albert Museum holds many photographic records of the 1858 photography exhibition. The photographs of the exhibition produced by the engraver and photographer Charles Thurston Thompson (1816-1868) are particularly notable. One such photograph looks through the exhibition, showing the packed display of photographic material on the walls. In the centre of the photograph, and leading the eye through the image, are three tables, on which there are many different examples of the stereoscope on display, for the viewing of stereoscopic photographs. The inclusion of stereoscopes in the exhibition attests to the existing, and increasing, popularity of photography in 1858, and the increasing role that stereoscopic photography was playing in British popular culture.

It is this increasing role of stereoscopic photography in nineteenth century British popular culture that is the focus of my chapter in this book. In particular, I am interested in the relationship between stereoscopic photography and travel. How did people use the stereoscope to look out at the world from the familiar environment of the home? To what extent did they use the three-dimensional nature of the stereoscope to travel vicariously through the image in front of them? How does this process of vicarious travel impact upon the viewer's relationship with new places, new scenes, new peoples? Stereoscopic photography allowed the viewer to participate in these processes, individually and collectively, all from the comfort and safety of their own home. The stereoscopic photograph provides the viewer with visual access to travel sites, acting as what Joan Schwartz (1996, p.16) calls 'the pretexts of travellers and as a surrogate for travel'. Using a selection of five stereoviews from various publishers and dating from the period 1880-1910, my chapter seeks to address these questions, investigating the symbiotic relationship between travel, stereoscopic photography, and the home. From the mid-nineteenth century onwards, a unique set of factors facilitated an explosion in popular print culture – including commercially printed photography such as stereoviews. In *Victorian Babylon* (2005, p.

151), Lynda Nead notes how 'technical developments in printing and the introduction of photography; fiscal changes to newspapers and periodical publishing; new forms of spectacular advertising; the rapid expansion of audiences and readerships; and the diversification of sites of …. leisure and entertainment' all positively impacted Victorian popular print culture. It was the introduction of different photographic technologies and fiscal changes to publishing that were to have the biggest effect on the proliferation of Victorian and Edwardian photographic culture.

In 1850, the journalist Leigh Hunt coined the phrase 'Taxes on Knowledge'. Here, he is referring to the taxes and excise duties that were placed on paper, much of which was imported to Britain in the mid-nineteenth century. Hunt argued that 'were the taxes on knowledge annihilated … scores of cheap daily and weekly papers would start into existence' (Hunt, 1850, pp. 305), making visual and textual information more readily available to the British public. Hunt was tapping into a popular movement that resulted in the abolition of controversial excise duties on paper in 1861 by William Gladstone, then Chancellor of the Exchequer. The popular movement for, and eventual abolition of, the 'Taxes on Knowledge' significantly reduced the costs of publishing for various parts of the popular press, and enabled the proliferation of commercial photographic printers in the late 1850s and 1860s. The major commercial photographic operations of companies such as Negretti & Zambra, F. Frith & Co., Underwood & Underwood, and the London Stereoscopic & Photographic Company all have their origins in the period of print culture proliferation we see in the 1850s and 1860s. The abolition of what Hunt terms 'Taxes on Knowledge' reduced the cost of mass-producing photographs for public consumption; commercial photographers would receive greater profits from printing their images on a large scale, and the reduction in costs would be directly passed on to the consumer. The proliferation of photographic culture occurs alongside other major changes in British culture in this period. Of particular relevance is the increase in travel we see in this period. The increased rail travel from the late 1830s onwards, and the establishment of travel operators in the 1840s, combined with increased sales of travel literature, began to open up the world to lower and middle class Britons. Thomas Cook ran his first British excursion to a temperance rally in 1841, the package including return rail travel for one shilling; by 1851 Cook was arranging for one hundred and fifty thousand people to visit the Great Exhibition and by 1855, he was arranging longer excursions to the continent. Travel guide publishers increased their English language publications in the 1860s. Between 1858 and 1868, fourteen new *Murray's Handbooks For Travellers* were published, covering locations as diverse as Devon and Cornwall, India, Germany, and Palestine. The publisher Karl Baedeker recognised the importance of the increasing number of British tourists in this period, publishing seven guides between 1863 and 1868, including guides for Switzerland, France, and Northern Italy. Indeed, the travel guide became so ubiquitous that the author E. M. Forster satirised its use in his novel *A Room With A View*, where the eccentric Miss Lavish tells Lucy that she 'hope[s] we shall soon emancipate you from Baedeker' (1908, pp. 16-17). But if Forster wanted people to be emancipated from the ever-present travel guide, they were by no means abandoning the travel views in their stereoscope. A combination of low prices, increased travel and literacy, and the popularity of the stereoscopic medium, meant that by 1900 Underwood & Underwood alone were printing over ten million stereoviews per year – over twenty-five thousand stereoviews published *per day*.

So, what is a stereoscope, and why might it be so popular? In 1838, the British scientist and inventor Sir Charles Wheatstone (1802-1875) gave a series of lectures at King's College, London, titled *Contributions to the Physiology of Vision*. The first part of his lecture series was given under the subtitle *On Some remarkable, and hitherto unobserved, Phenomena of Binocular Vision*, and focused on how humans see in three dimensions. Wheatstone (1838) noted the visual gap between the two eyes, which becomes clear when an 'object is placed so near the eyes that to view it the optic axes must converge'. As the object moves closer to the eye, the 'convergence of the optic axes becomes greater' and each

eye's view of the object increases in dissimilarity. By moving the object away from the eyes, the two dissimilar views converge and combine, deepening the sense of three dimensions seen by each individual eye. Wheatstone goes on to propose a stereoscopic viewer that would use mirrors and a viewer to mimic the convergence of each eye's vision to create a three-dimensional view. In his 1859 essay for *The Atlantic Monthly*, 'The Stereoscope and The Stereograph', the American polymath Oliver Wendell Holmes (1809-1894) clearly described how the stereoscope worked in layman's terms. Our two eyes 'see different pictures of the same thing, for the obvious reason that they are two or three inches apart'. By 'means of these two different views of an object, the mind … feels round it and gets an idea of its solidity', converting two flatt(er) images into three dimensions. Holmes emphasises how, through this process, 'we clasp an object with our eyes, as with our arms, or with our hands' (1859, pp. 738-748).

Wheatstone wrote to Fox Talbot in 1840 to propose the creation of stereoscopic images for use in his viewer, and so the first stereoscopic photographs were created. The Scottish physicist and inventor, Sir David Brewster (1781-1868), developed the principle of Wheatstone's cumbersome, mirror-based stereoscope, creating the first lens-based or 'lenticular' stereoscope in 1849. Following his collaboration with the French instrument maker Jules Duboscq (1817-1876) to improve the lens quality, Brewster demonstrated his lenticular stereoscope at the Great Exhibition in 1851. Here, he presented a stereoscope to Queen Victoria, who was enthralled by the effect of the stereoscope, and launched an overnight craze for three-dimensional views. In three months, Brewster sold over two hundred and fifty thousand lenticular stereoscopes to people from all social classes. As R. Hunt noted in an article for the *Art Journal* in 1858 this was a figure assisted by royal endorsement and the low cost of the stereoscope at only one shilling. The low price of the stereoscope brought the pleasures it afforded to all classes; its popularity coming from the viewer being charmed by the 'pleasure' of viewing the image in 'three dimensions' (Hunt, 1858, p. 305). The popularity of Brewster's stereoscope established its position as the most popular optical toy of the Victorian and Edwardian period. However, Brewster's stereoscope could be awkward to use, and cheaper versions of his stereoscope were made from *papier mâché*. Holmes created – and intentionally did not patent – a streamlined, handheld stereoscope in 1861. The Holmes stereoscope was made of wood, with an adjustable frame to hold the stereoview, and clear glass lenses inset into one end of the viewer. The handle for the Holmes stereoscope also folded down for convenience, and included a hood above the space through which the user looked. Indeed, Holmes noted himself that 'it was far easier to manage, especially with regard to light, and could be made much cheaper than the old-fashioned contrivances' (1952, p. 1). Reflecting on his adaptations to the stereoscope for *The Philadelphia Photographer* in 1869, Holmes confidently pointed out that 'there was not any wholly new principle involved in its construction, but, it proved so much more convenient than any hand instrument in use, that it gradually drove them all out of the field' (1952, p. 1). Holmes 'believed that it would add much to the comfort and pleasure of the lover of stereoscopic pictures', particularly in the domestic space, and it did.

Originally, stereoscopes were scientific tools, enabling the study of the physiology of vision by scientists such as Brewster and Hermann von Helmholtz (1821-1894), but they became tools of pleasure and entertainment. Empirically, stereoscopes are tools of spectacle and of surveillance. Jonathan Crary in *Techniques of the Observer* notes how the regimes of surveillance and spectacle coincide in the stereoscope, rather than being in opposition as Foucault argues (1990, p.18). Stereoscopes fed into the fashionable craze for images of travel and the quest for knowledge of other cultures and countries that was both educational and pleasurable. Significantly, in his book *The Stereoscope: Its History, Theory and Construction*, Brewster dedicates two whole chapters to the educational and pleasurable purposes of the stereoscope. In his chapter on the 'Application of the Stereoscope to Educational Purposes', Brewster argues that one of the key values of the stereoscope is as 'an indispensable auxiliary'

in education, enabling the student to 'acquire a general knowledge of the works of God and man … of the miracles of nature and art' (1856, p. 193). Directly following this is Brewster's chapter on the 'Application of the Stereoscope to Purposes of Amusement'. Emphasising the scientific background of the stereoscope, Brewster proposes that 'every instrument depending on scientific principles, when employed for the purposes of amusement must necessarily be instructive'. After all, for Brewster, the 'toy which amuses the child will instruct the sage' (1856, p. 201). Travel views in the stereoscope may seem, at first glance, to be 'pretty scenes', but the subject of the travel stereoview provide an excellent prism through which viewers can explore the world and their preconceptions, all from the safety and comfort of their own home.

Stereoscopic images viewed in a stereoscope produce a three-dimensional optical illusion from two flat images, placed next to each other. In a photographic stereoscope, two photographs are taken of the same scene, at eye-width apart. This was done by moving one camera two to three inches to the side of the first photograph; later, stereoscopic cameras enabled photographers to take the two images simultaneously. The images are placed next to each other, and when the viewer looks at them through the stereoscope, their mind bridges the gap between the two images, forming an image that appears to be in three dimensions. For Helmholtz, the two discrete photographs of the same object seen by the 'two distinct nerves' of the viewer's eyes were a means to explore the amazing feats of human sight (1995, p.175). The mathematician William O. Lonie (1822-1894) described in 1856 how the stereoscope had a 'purpose as an instrument for the creation of solid images' because it blurred together 'the plane pictures of any object or landscape, previously taken from the two points of sight …. correspond[ed] with the retinal pictures taken from nature by our two eyes' (1856, pp.9-10). Here, Lonie highlights the emphasis on stereoscopic vision (using both eyes together) present in a stereoscope as opposed to the emphasis on monoscopic vision (using each eye separately) in instruments such as the telescope or microscope. To the naked eye, stereoviews are monocular, yet when mediated through the stereoscope, the two images blend and mix, transforming into one image. As such the stereoscope 'seemingly annuls itself because its effect inverts its cause or origin; two photographs seen with two eyes give one image'. The view produced by a stereoscope is, therefore, an illusion, an optical trick, that immerses the viewer in a three-dimensional scene. The three-dimensional scene created from two flat photographs in the stereoscope draws attention to the phenomenon of depth of field and shows the potential for manipulating what the eye sees (Smith, 1989, p.86).

The creation of visual depth in the stereoview is particularly evident in *Falls from Suspension Bridge, Niagara* (Fig. 1; c1880). This stereoview is a photograph of Niagara Falls, Canada, taken from the Niagara Suspension Bridge, which was open between 1851 and 1897. The right-hand side of the image shows the paddle steamer, the *Maid of the Mist*, moving across Lake Ontario towards Niagara Falls, from the jetty on the left. The Falls themselves dominate the back of the image, where we can clearly see the mist rising from water crashing upon water. In the far distance, we can see the treeline behind Lake Erie. The direction of the *Maid of the Mist* and the line of the Falls, from left foreground receding into far right background, pulls the viewer's eye through the image and reinforces the sense of depth of field. It is a dramatic image that transports the viewer from their safe, comfortable home world to the dramatic landscape around Niagara Falls. It is a spectacular image, designed to amaze the viewer with a depiction of a dramatic landscape that would, for many contemporary viewers, have been outside their ordinary realm of experience. Landscape views like *Falls from Suspension Bridge, Niagara* were immensely popular with the viewing public. A glance at any catalogue of stereoscopic views shows how much emphasis was placed on landscapes and locations that were distinctly different – if not completely exotic to – the viewer's home location. Indeed, the illusory nature and immense popularity of the stereoscope facilitated the viewing of landscapes, like *Falls from Suspension Bridge, Niagara*, that were inherently different to the British landscape and visual experience. In *Binocular Vision*

and Stereopsis, Ian Howard emphasises how 'until the advent of the cinema, the stereoscope was the optical wonder of the age, allowing people to see the world from the comfort of their living rooms' (1995, p. 22). Lindsay Smith notes how the popularity of the stereoscope 'brought the spectacle of foreign landscape[s] to the British hearth' (1995, p. 8).

Contemporary users of the stereoscope highlighted the spectacularly immersive nature of the stereoscope. The experience of using the stereoscope was described by Albert Osborne in 1909 as 'that of being in the place itself, rather than an experience of being in our home seeing a picture of the place' (1909, p. 74). Viewers were intellectually, mentally, and visually transported from their home to the location of the stereoview. Stereoviews like *Falls from Suspension Bridge, Niagara* therefore become a substitute for the place depicted before the viewer. By looking through the stereoscope at an image of Niagara Falls, the viewer becomes socially and spatially separated from their 'normal place of residence and conventional social ties'; they are separated from their home (Urry, 1990, p. 10). This social and spatial separation is reinforced by the very process of looking through the stereoscope. The stereoscope is held close to the face, and has a hood occluding the viewer's peripheral vision. The hood prevents the viewer's eyes from picking up the outside world, focussing the mind on the world within the stereoscope. In *Falls from Suspension Bridge, Niagara*, frame is therefore removed from the image, blurring the boundary between viewer and scene, placing them in the image. Thus, the viewer is 'drawn into the intensified illusion of all-round, deep and receding space' of Niagara Falls, becoming willing participants in a 'vivid imaginary transportation' into the replicated space of the stereoview (Osborne, 2000, p. 20). The viewer therefore occupies a space within a space: the replicated space of the stereoscope, looking out on to the world, situated within the real space of the domestic environment.

The imaginary transportation of the viewer into the replicated space of the stereoview is not confined to photographs taken at a distance. For example, in *Prospect Park, Niagara* (Fig. 2, 1880s), the viewer is transported through the stereoscope to a position at the edge of the Falls. The line of the waterfall moves up the centre of the image into the background. The water flows dramatically over the Falls from Lake Erie on the left to Lake Ontario on the right. The emphasis of the stereoscope is on the flow of water over the sheer drop of the waterfall. When the viewer looks at the stereoview through the stereoscope, they can see individual waves, flows of water, dips in the edge of the Falls, and separate drops of water. This intense representation of detail in *Prospect Park, Niagara* draws the viewer into the image, into the spectacle of the water passing over the Falls, from one lake into another. *Prospect Park, Niagara* is a moment frozen in time, frozen for eternity. Photographs like *Prospect Park, Niagara* arrest time, they encapsulate one moment: a process described by Emmanuelle Lévinas as 'the petrification of the instant'. In his reference to Niobe, and the 'presentiment of [her] fate' at being turned into stone, Lévinas also identifies for us the central paradox at the centre of photography – a 'quality of the already having been of that which is yet to come' (Lévinas, 1989, pp. 10-11).

In *Prospect Park, Niagara*, the Falls are frozen in a moment, which will now continue forever. Thus, this stereoview can be seen as the perfect embodiment of what the photographer Henri Cartier-Bresson (1908-2004) termed the 'decisive moment'. For Cartier-Bresson, the 'decisive moment' in photography is the 'simultaneous recognition, in a fraction of a second, of the significance of an event as well as of a precise organisation of forms which give that event its proper expression' (1952, pp. 1-14). Time is suspended both for the Falls and for the viewer. One expects the waterfall to move, but it does not, invoking in the viewer a feeling of nervousness and terror: they are visually and temporally 'on the edge' of Niagara Falls. Suspension is a theme in this stereoview. The viewer, fully immersed in the scene in front of them, is suspended in time as well as at the edge of Niagara Falls. This suspension at the edge of the Falls induces a feeling of awe and wonder at the power of Niagara Falls in the viewer. From the comfort of their own home, from the commanding prospect of the stereoview, the viewer

looks out over Niagara Falls, with a mixture of awe, wonder, and terror. This cacophony of feelings the viewer experiences when looking at *Prospect Park, Niagara* therefore provokes in the viewer a sense of the Sublime. The Sublime is a feeling of awe, wonder, and terror at the greatness and power of the natural world. In 1756, the philosopher Edmund Burke (1729-1796) published his influential treatise on aesthetics, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*. Here, Burke clearly defined the notion of the Sublime, proposing that it is:

> Whatever is fitted in any sort to excite the ideas of pain, and danger, that is to say, what is in any sort terrible, or is conversant about terrible objects, or operates in a manner analogous to terror, is a source of the sublime; that is, it is productive of the strongest emotion which the mind is capable of feeling. (Burke, 1756, pp. 58-9).

The Sublime, therefore, is a direct contrast with Burke's concept of the Beautiful, which he describes as that 'satisfaction which arises to the mind upon the contemplation of anything beautiful' (Burke, p. 162). Because *Prospect Park, Niagara* provokes feelings of terror about the power of Niagara Falls, the power of the natural world, in the viewer, the scene recreated in the stereoview is therefore Sublime. The social and spatial separation the viewer experiences when they look through the stereoscope at *Prospect Park, Niagara* heightens the feeling of the Sublime in the viewer, because they are being separated from the safety of the domestic space.

Burke's division of aesthetics into the Sublime and the Beautiful is presented as a dichotomy, where there are two distinct and diametrically opposed categories, with nothing in between. In 1768, the Rev. William Gilpin published his *Essay on Prints*, where he developed the ideas of the Sublime and the Beautiful proposed by Burke, and first introduced his ideas about the picturesque. For Gilpin, visual concepts like the Sublime and the Beautiful were not clearly divided, discrete, extreme categories. The Sublime and the Beautiful were, in fact, on a sort of 'slider', blending from one to the other. The picturesque could be neatly placed on this slider, somewhere between the Sublime and the Beautiful. The term 'picturesque' had been used as early as 1703, and quite literally meant 'in the manner of a picture, fit to be made into a picture' (Oxford English Dictionary). In his essay on prints, Gilpin defined the picturesque as 'a term expressive of that particular kind of beauty, which is agreeable in a picture' (Gilpin, 1768, p. xii). J. M. W. Turner's *The Chancel and Crossing of Tintern Abbey* (1794) and Claude Lorrain's *Landscape with Ascanius Shooting the Stag of Sylvia* (1682), are significant examples of the use of the picturesque in painting. In his 1782 travel book, *Observations on the River Wye*, Gilpin applied his notion of the picturesque to the British landscape, on a journey that would become known as The Wye Tour. With Gilpin's definition of the picturesque in mind, how can we apply this concept to the stereoview? For example, *Rugged Mount Abu, S.W. from Dilwarra Temples – Palace of Raja of Bikanir in the Distance* (1890s, Fig. 3), can be clearly categorised as a picturesque image.

In *Rugged Mount Abu*, the stereoscopic viewer is presented with a view of the rural landscape around Dilwara temples in southwestern Rajasthan, India. Though rocky, the landscape rolls from the foreground into the background, with boulders and brush visible. A row of palm trees sweeps from the top left to the centre of the image. In the centre of the photograph, in the middle ground, are some cows and goats with their attendants. A large gully cuts diagonally across the image, leading the viewer's eye from near to far distance, where we can see the top of the Jain temples in the back of the photograph. The depiction of the landscape around Dilwara fits with Gilpin's description of 'picturesque beauty', which:

> We seek … among all the ingredients of landscape – trees – rocks – broken-grounds – woods – rivers – lakes – plains – vallies – mountains – and distances. These objects *in themselves* produce infinite variety. No two rocks, or trees are exactly the same. They are varied, a second time, by *combination*; and almost as much, a third time, by different *lights, and shades*, and other aerial effects. Sometimes we find among them the exhibition of *a whole*; but oftener we find only beautiful *parts*. (Gilpin, 1792, p. 42, original emphasis preserved)

These individual elements, such as trees, rocks, and broken ground, can be seen in *Rugged Mount Abu*, making the image picturesque. For Gilpin, the best way to represent the picturesque is to think of the concept as the 'great object we pursue through the scenery of nature; and examine … by the rules of painting' (Gilpin, 1792, p. 42). As a stereoview, *Rugged Mount Abu* does have a painterly quality to it. The layout of the scene presented to us is reminiscent of William Hodges' painting *Tomb and Distant View of the Rajmahal Hills* (1782). Like *Rugged Mount Abu*, Hodges' painting includes palm trees, a rugged, broken landscape, and flocks of cattle.

Hodges' painting, and *Rugged Mount Abu*, invite the viewer to make comparison between the landscape presented to them and the landscape in which they are located. Gilpin's description of the picturesque was based on an analysis of the British landscape - his home landscape. Both images present a romanticised view of the East, from a pleasing, commanding prospect that places the landscape under the visual control of the viewer. *Rugged Mount Abu* can be placed within a process of making India Romantic, picturesque, reminiscent of the English landscape; a process epitomised by the aquatints of India produced by Thomas and William Daniell. It can be directly compared to Romanticised, picturesque views of the English landscape produced by artists like John Constable and J. M. W. Turner. Thus, *Rugged Mount Abu* simultaneously reminds the viewer of home, and reinforces the exoticism of the landscape of Rajasthan. It is both like, and not like, the British home landscape; it is a distilled image, a symbol of Indian rural-ness, exotic, Orientalised, 'Other'. The Orientalised view of Rajasthan in *Rugged Mount Abu* has its basis in the establishment of imperial India as fundamentally 'Other', fundamentally different, to the home of the British viewer. The viewer of the stereoscope watches the scene ahead of them: as Edward Said posits, 'the European, whose sensibility tours the Orient, is a watcher, never involved, always detached … The Orient becomes a living tableau' (Said, 1976, p. 103). Like *Prospect Park, Niagara*, the stereoview of *Rugged Mount Abu* is simultaneously moving and still; it is a frozen moment, where the instant has been petrified. *Rugged Mount Abu* presents to the viewer an Indian rural idyll, frozen in time at the moment of the photograph. This is a rural idyll the viewer would be able to compare to their preconceived mental images of the stereotypical rural idyll at home. *Rugged Mount Abu* thus represents a desire for British viewers to recreate a 'home away from home', looking for elements of the landscape and people that are familiar from home, in order to make them safer, understandable, comprehendible. The image is not moving; its stillness makes it non-threatening and adds a level of safety to the image. Its stillness allows the viewer time to contemplate the exotic scene, in the virtual space created by the stereoscope from the safety of their home,

Gilpin's reference to 'different *lights, and shades*, and other aerial effects' (Gilpin, 1792, p. 42) in terms of the picturesque becomes particularly relevant in the context of *Rugged Mount Abu*. The photograph is monochrome, so the light and dark shading becomes particularly significant for the representation of detail. The light level in the photograph gives a high level of contrast between light and shadow, emphasising the details in the image. Indeed, in his essay *The Churches of North France: The Shadows of Amiens*, the artist and social thinker William Morris described how:

> I am describing [the churches] as well as I can from such photographs as I have; and these, as everybody knows, though very distinct and faithful, when they show anything at all, yet, in some places, where the shadows are deep, show simply nothing. They tell me, too, nothing whatever of the colour of the building; in fact, their brown and yellow is as unlike as possible to the grey of Amiens. So, for the facts of form, I have to look at my photographs; for facts of colour I have to try and remember the day or two I spent at Amiens, and the reference to the former has considerably dulled my memory of the latter. (Morris, 1856, n.p).

For Morris, photography aids the representation and remembering of detail – if not the colours – of a location. Thus, *Rugged Mount Abu* presents us with the fine detail of the Indian landscape, but requires the viewer to fill in the colours of the image based on their prior knowledge of the Indian landscape. This is knowledge that they would have gained from literary works based in India, such as Rudyard Kipling's *Kim* (1901) or *The Jungle Book* (1894), or Murray's *Guide to India* (various dates from 1859 onwards). The incredibly fine detail shown in *Rugged Mount Abu* makes the landscape almost tangible. This deepens the stereoscope's role as a tactile object, designed to be held, touched, investigated, passed around. The created space within the stereoscope becomes tactile. The stereoscope is already a tactile object – the user handles the cards, and places them in the viewer, which is handheld and not free-standing. Like the items in the home around them that they could touch, the Victorian and Edwardian viewer could almost reach out and touch the items in the stereoscope.

When the viewer looks through the stereoscope, the image is represented to them in layers, much like the pieces of a stage set; a stage set they can almost - but not quite - touch. This multi-layered, tactile aspect of the stereoscope reinforces the performative nature of the stereoscope. *Rugged Mount Abu* is a landscape that is performing Romantic, exotic ideals of the Indian landscape. Views within the stereoscope – from Canada to India to Britain – allow for a performance of people's personal ideas about the world around them. Stereoscope views provided ordinary Victorians and Edwardians with the opportunity to look out at the world, to explore an ever-expanding world, from the safety of their own home. The stereoscope allowed the user to explore ideas of the Sublime, the picturesque, the Beautiful in three dimensions. This safe, three-dimensional space allowed viewers to explore and perform ideas of Empire and exploration. Still images in the space of the stereoscope quite literally froze and suspended time, the decisive moments providing excellent opportunities for the viewer to question, to find out more, to push the boundaries of their domestic world by looking out. The stereoscope brought the world into the home and the home into the world, breaking the boundaries between countries and landscapes, what Kipling describes in his poem *East Is East and West is West* (1889): 'there is neither East nor West, Border, nor Breed, nor Birth … though they come from the ends of the earth!'

Fig. 8: Falls from Suspension Bridge, Niagara

Fig. 9: Falls from Suspension Bridge, Niagara

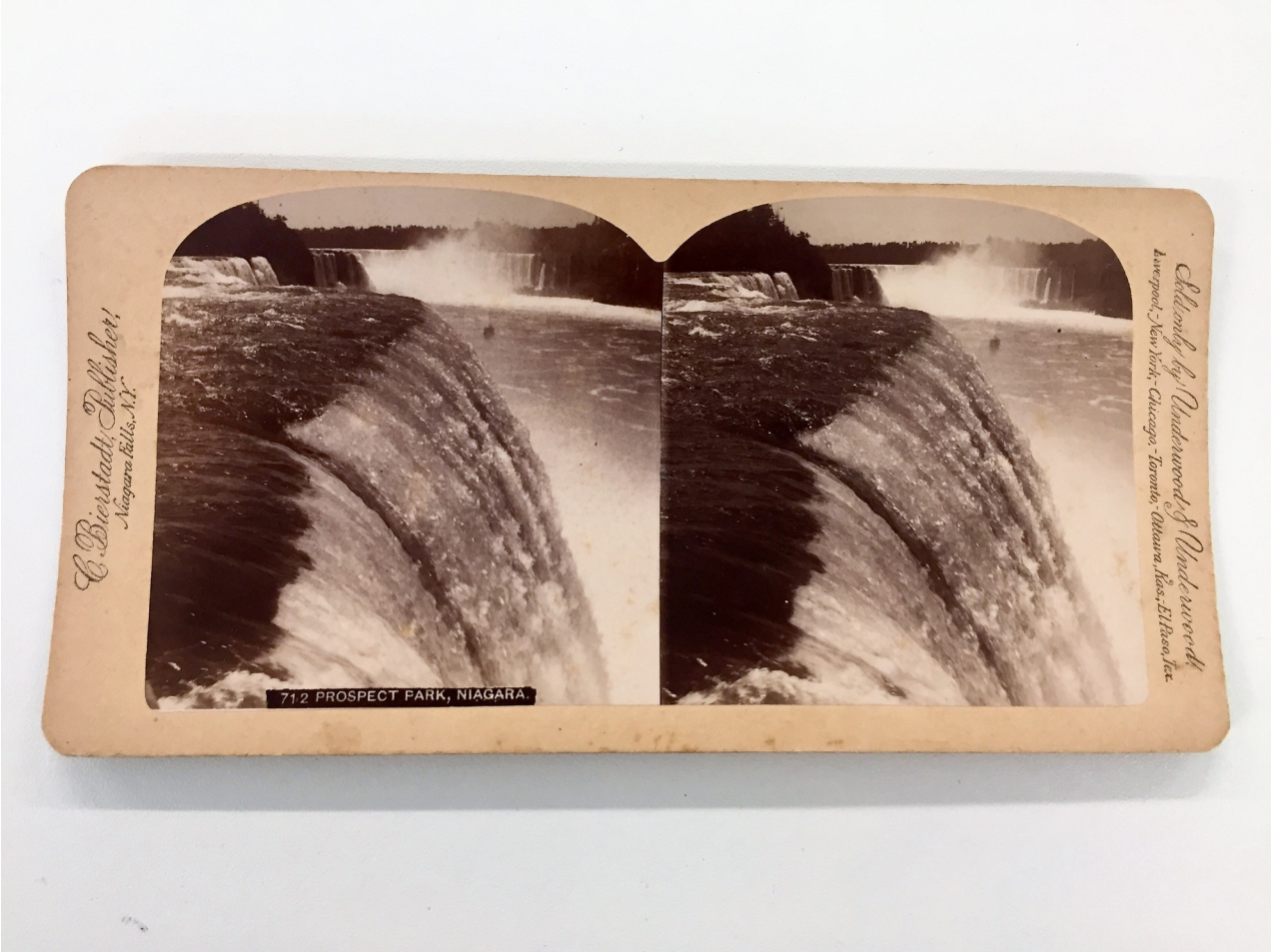

Fig. 10: Prospect Park Niagara

Fig. 11: Prospect Park Niagara

Fig. 12: Dilwara

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